

# How and what do medical students learn in clerkships? Experience-based learning (ExBL)

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## How and what do medical students learn in clerkships? Experience based learning (ExBL)

Tim Dornan • Naomi Tan • Henny Boshuizen • Rachel Gick • Rachel Isba • Karen Mann • Albert Scherpbier • John Spencer • Elizabeth Timmins

### Abstract

Clerkship education has been called a 'black box' because so little is known about what, how, and under which conditions students learn. Our aim was to develop a blueprint for education in ambulatory and inpatient settings, and in single encounters, traditional rotations, or longitudinal experiences. We identified 548 causal links between conditions, processes, and outcomes of clerkship education in 168 empirical papers published over 7 years and synthesised a theory of how students learn. They do so when they are given affective, pedagogic, and organisational support. Affective support comes from doctors' and many other health workers' interactions with students. Pedagogic support comes from informal interactions and modelling as well as doctors' teaching, supervision, and precepting. Organisational support comes from every tier of a curriculum. Core learning processes of observing, rehearsing, and contributing to authentic clinical activities take place within triadic relationships between students, patients, and practitioners. The phrase 'supported participation in practice' best describes the educational process. Much of the learning that results is too tacit, complex, contextualised, and individual to be defined as a set of competencies. We conclude that clerkship education takes place within relationships between students, patients, and doctors, supported by informal, individual, contextualised, and affective elements of the learned curriculum, alongside formal, standardised elements of the taught and assessed curriculum. This research provides a blueprint for designing and evaluating clerkship curricula as well as helping patients, students, and practitioners collaborate in educating tomorrow's doctors.

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